

Title (en)  
VARIABLE DISPLACEMENT VARIABLE PRESSURE VANE PUMP SYSTEM

Title (de)  
VERSTELLFLÜGELPUMPENSYSTEM MIT GLEITDRUCK

Title (fr)  
SYSTEME DE POMPE A PALETTES A CYLINDREE VARIABLE ET A PRESSION VARIABLE

Publication  
**EP 1979616 B1 20151223 (EN)**

Application  
**EP 07719358 A 20070131**

Priority  
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• US 76372006 P 20060131

Abstract (en)  
[origin: WO2007087704A1] A traditional variable displacement vane pump must be designed to provide maximum fluid pressure and thus experiences reduced energy efficiency when the system operating conditions do not necessitate such high requirements. A variable displacement variable pressure vane pump system is provided comprising a first control mechanism, which can be a control chamber (68) directly acting on the control slider (36) or a control chamber (68) and control cylinder (44) which acts on the control slider (36) and a second control mechanism which is a control chamber (72) and control cylinder (44) which acts on the control slider (36). A control valve (76), operated by an engine control unit or other suitable control mechanism, selectively provides pressurized lubrication oil to the second control mechanism to allow the output of the pump system to more closely match the requirements of the mechanical system.

IPC 8 full level  
**F01M 1/02** (2006.01); **F04C 2/04** (2006.01); **F04C 14/22** (2006.01); **F04C 14/24** (2006.01); **F04C 15/06** (2006.01); **F16N 13/20** (2006.01)

CPC (source: EP KR US)  
**F01M 1/02** (2013.01 - EP KR US); **F04C 2/04** (2013.01 - US); **F04C 14/22** (2013.01 - KR); **F04C 14/226** (2013.01 - EP US); **F04C 14/24** (2013.01 - KR); **F04C 15/06** (2013.01 - KR); **F16N 13/20** (2013.01 - EP US); **F01M 2001/0238** (2013.01 - EP US)

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DOCDB simple family (publication)  
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